Black Horse Pike Regional School District

Home to Two Green Ribbon Schools

Timber Creek Regional High School (built 2001)

&

Triton Regional High School (built 1956)

Green Ribbon Schools

Dr. Brian Repici, Superintendent

Black Horse Pike Regional School District's GREEN EFFORTS

- The Black Horse Pike Regional School District has a Green Team committed to changing behaviors, practices and products to lead to greater energy efficiencies and responsible and sustainable environmental stewardship.

- Session participants will learn how the district realized a 20 percent reduction in utility costs, discontinued the use of harmful chemicals, improved indoor air quality, enhanced recycling efforts, and created organic gardens that will support the cafeteria and community.

WHERE DO I START?
TRACKING UTILITY COSTS

Collect Baseline Data (Internally or Externally Derived)
Costs and Output Relative to Utility; i.e. Kw/hrs; Therms
Is an ESIP necessary?

Formulate a GREEN TEAM. Involve students, administrators, Board of Education members, cafeteria department and the maintenance department. Develop an action plan and yearly goals relative to "going green." Consider green cleaning, diamond cutting terrazzo floors, trash liners, bolstering recycling and compost programs, and reviewing electricity patterns in computer labs and classrooms.

Keep an account for any energy rebates received. Keep track of purchases and costs like LED lighting, recyclable food containers, compostable and recycling containers, environmentally friendly trash liners.

Are you able to build an Organic Garden and incorporate that into your curriculum? Hold a Ribbon Cutting Ceremony with students, parents and the community. Plan to utilize those products in the cafeteria, special events with parents, or in FACS classes.

Building the first Garden boxes

Made from repurposed wood

- ESY students tend the garden during the summer
- This year we will expand and grow new vegetation/crops
- Students and staff will have the opportunity to sponsor a garden box

Timber Creek's Organic Garden

- Our Organic Garden is constructed of pallet waste by our staff and students
- Provides our cafeteria with fresh produce including, basil, parsley, tomatoes, strawberries, onions, cabbage, eggplant.
- Our students tend and maintain our garden throughout the school year

Green Team Lends A Hand

Dedicated to Conservation Through Single Stream Recycling and Composting

The Black Horse Pike Regional School District has established a GREEN Team consisting of personnel and students throughout the district. Our primary goal is to serve as role models within our school communities so that we can become more environmentally friendly and fiscally responsible. Through our actions, we will inspire and impact our peers, family members, friends, neighbors and the community at large to practice "cleaner and greener" habits to ensure a healthier world for tomorrow.

Solar Powered Irrigation Pump

- 275 gallon pallet tote
- Collects water run off from the roof
- Solar powered
- Waterproof key switch which powers system on/off

Our Garden Thrives: NJ Department of Agriculture visits Timber Creek to recognize us for our farm to school initiatives

Decrease substantiated by tracking electric and gas invoices

School Year	Electricity Output kw/h	Gas Output Therms	CO2 levels from Electricity	CO2 levels from Gas
2012-2013	3,883,766	181,229	5,903,324	2,120,379
2013-2014	3,288,738	131,720	4,998,81	1,541,124

CURRICULUM GONE GREEN!

Our goal is to inspire students to take responsibility for the sustainability of the world.

Emphasizing hands-on learning while developing social responsibility

Through a Curriculum which:

Develops the essential skills of: reading, writing, mathematics and science; Integrates green curriculum topics into science and other core courses; Recognizes and appreciates the local geographical and cultural context

The aims of our District are:

To heighten students' environmental awareness and to promote stewardship

This includes awareness of our schools':

- organic garden
- greenhouses
- rain garden
- waste and water usage
- energy consumption
- composting effort
- single stream recycling program
- reduction of harmful chemicals and VOC's in cleaning products
- local community
- overall reduction of our carbon footprint

Biology

Rain Garden Activities:

- The *Stormwater Management in Your Schoolyard* program was developed by the Rutgers Cooperative Extension Water Resources Program in collaboration with the Northeast States & Caribbean Islands Regional Water Center and the New Jersey Sea Grant Consortium. The program provides educational lectures, hands-on activities, and community-level outreach for students on the topics of water quality issues and stormwater management practices such as rain gardens and rain barrels.

- The Timber Creek rain garden was installed to beautify the site and to intercept, treat, and infiltrate stormwater runoff from the sidewalk and surrounding courtyard area. This rain garden was installed to serve as a demonstration and an outdoor classroom for the staff, students, and visitors of Timber Creek High School. To educate the students about rain gardens, the *Stormwater Management in Your School Yard* educational program was presented to approximately one hundred and seventy-five Environmental Science, Honor's Biology and AP Environmental Science students. During these presentations, the students learned about stormwater management, rain garden site selection, and the native plants in their rain garden.

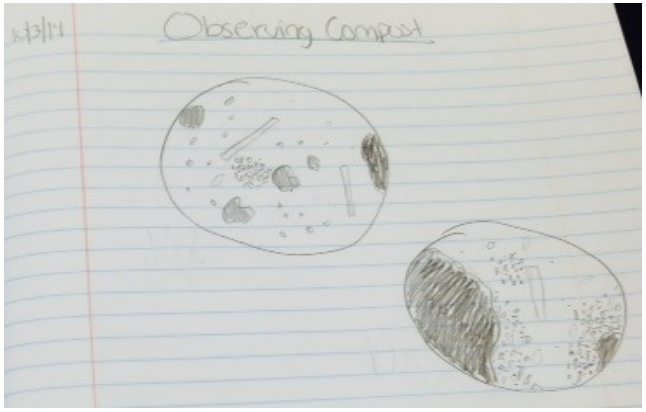
Environmental Science

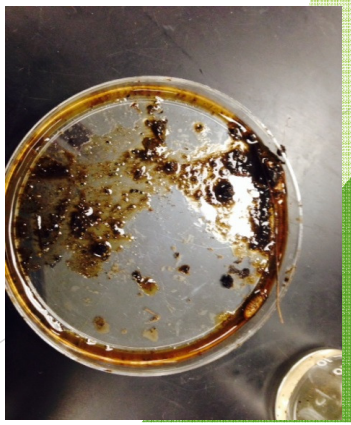
Composting Lab Activities:

Investigate compost to evaluate its purpose and to explain how it fits into the flow of energy and matter in ecosystems.

Students will be able to:

- **Hypothesize how yard waste and food scraps turn into compost**
- **Create a wet mount and observe compost microorganisms under the microscope**
- **Design how to set up a compost pile at home**
- **Design a simple experiment to test effective compost**
- **Explain the importance of composting, locally and globally**





Why Compost?

Good for Your School

Allows Students and Staff to learn about nature, conserve resources, reduce waste, and save money by cutting down on garbage costs.

Good for the Community

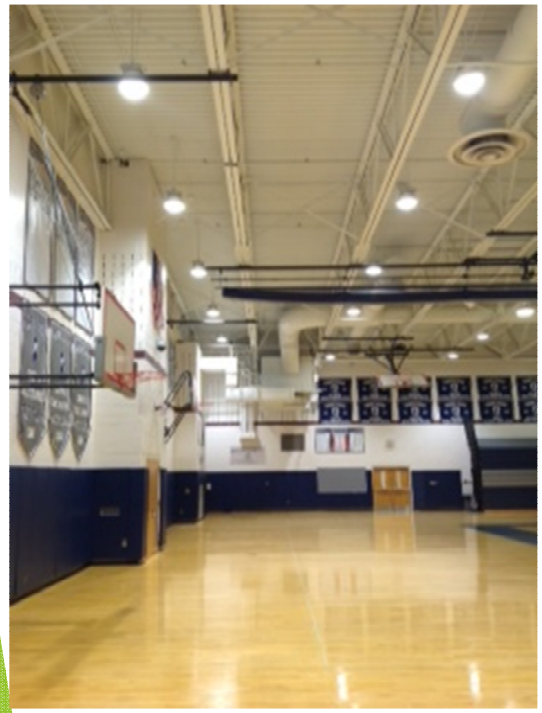
Compost improves soil structure and texture, increases the soil's ability to hold both water and air, and stimulates healthy root development in plants.

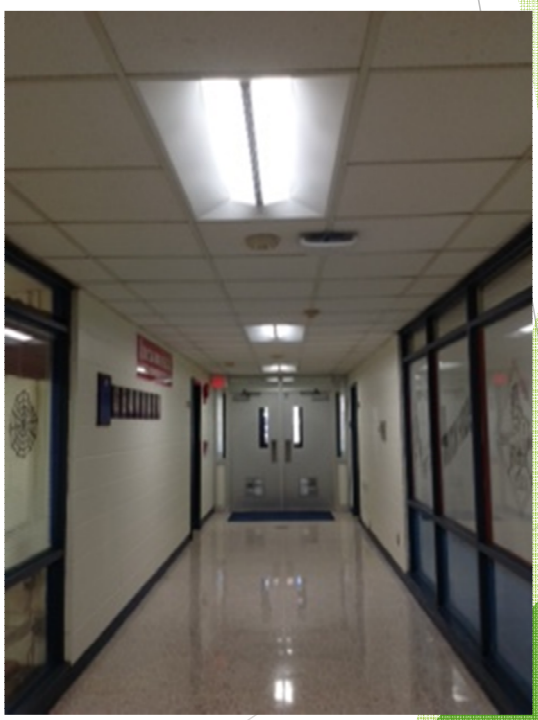
Good for the Environment

Food scraps and yard waste make up 20-30% of the waste stream. Making compost keeps these materials out of landfills, where they take up precious space and release methane emissions, a greenhouse gas 21 times more potent than carbon dioxide, into the atmosphere.

Newly Constructed Garden Boxes From Recycled Concrete Pavers

BHPRSD was part of the largest ESIP project to date in New Jersey.
In addition, the district has secured nearly $50,000 in rebate incentives through NJ Clean Energy Program.





12 Volt Deep Cycle Marine Battery

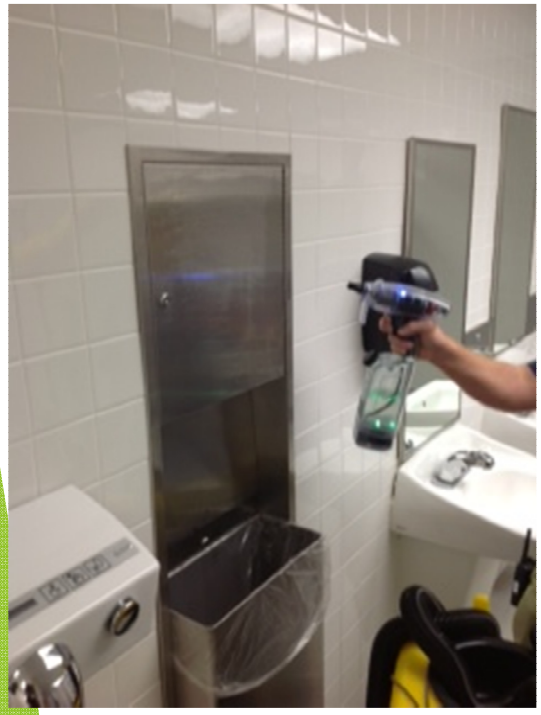
A single 12 Volt solar panel is used to charge a standard deep cycle battery.

PPA Provides 1.5 Mega Watts of clean renewable energy with the added benefit of long term predictable energy costs.

High Efficiency Condensing Boilers
Reduce heating costs by 18%

Green Cleaning
Without Sacrificing Health and Safety

IONATOR



Diamond Polishing

No Touch cleaning using Envirox 117